

Pg 191 (White Handout)

- 5.8)
- D denote Dodgers winning
 - L denote Los Angeles celebrating
 - W denote White Sox winning
 - C denote Chicago celebrating

Hence the hypotheses are

$$(D \rightarrow L) \wedge (W \rightarrow C) \quad \text{--- ①}$$

$$(D \wedge \neg W) \vee (W \wedge \neg D) \quad \text{--- ②}$$

$$(D \rightarrow \neg C) \wedge (W \rightarrow \neg L) \quad \text{--- ③}$$

The conclusion is

$$C \leftrightarrow \neg L$$

A valid argument means that

$$(\text{hypothesis ①}) \wedge (\text{hypothesis ②}) \wedge (\text{hypothesis ③}) \rightarrow \text{conclusion}$$

is a Tautology.

We can check this by showing that we can't have hypothesis ①, hypothesis ② and hypothesis True and the conclusion false.